



REF : SCFS 2018/12

ACL-Screed FS

DESCRIPTION

ACL-Screed FS is a water-based polyurethane resin floor screed designed to provide excellent heavy duty usage with resistance to thermal shock, abrasion and chemical attack in aggressive industrial environments. ACL-Screed FS surfaces are stable to steam cleaning and resistant to boiling water and process liquids up to 120°C when applied at 9mm nominal thickness. A matt, textured surface is provided that is seamless with anti-slip properties.

ADVANTAGES

- High chemical resistance
- Resistant to hot water & steam water
- Self sealing
- Excellent slip resistant finish
- Matt finish
- Food safe & non taint (Camden BRI approved)
- Extremely hard wearing

RECOMMENDED USES

- Food manufacture & processing
- Brewing & beverage
- Dairies
- Commercial kitchens
- Pharmaceutical & chemical plant processing
- Abattoirs and meat processing
- Heavy duty plant and traffic areas

PRODUCT INFORMATION

System Thickness (dry)	Solids content by weight	Pack sizes	Pack make up	Shelf life	Storage
6mm to 9mm	100 %	30 kg.	1 X Base 1 X Hardener 1 X Aggregate bag	12 Months (Base & Hardener) 3 Months (Aggregates)	Keep out of direct sunlight. Store in a dry place, not below 15°C

DRYING TIMES & COVERAGE RATES at 20°C

Coverage rate	Pot life	Recoat time	Light traffic	Full traffic	Full chemical cure
30 kg. will cover 2.2 m ² @ 6mm or 1.1 m ² @ 9mm	15 minutes (From Mixing)	N/A	12 -16 Hours	48 Hours	3 - 5 Days

Specification

Product : ACL-Screed FS

Finish : Textured, Matt

Thickness : 6mm to 9mm

Colour : See PU Screed Colour Chart

Products required for this system

Primer : ACL-Prime / ACL-Prime DPM

System : ACL-Screed FS at required thickness

Surface Seal : Not required

NB: All polyurethane systems based on MDI will yellow with time this is a surface discolouration under the effect of UV light and does not in any way affect the durability of the floor finish. Darker colours will not show this effect as much as light colours.

Preparation

To achieve the best performance from **ACL-Screed FS**, correct surface preparation is essential. Substrates must be clean, sound, dry and free of surface laitance with a minimum strength of 25N/mm².

All surfaces must be prepared by vacuum blasting or mechanical abrasion. **ACL-Screed FS** may be applied to substrates with a surface temperature in the range of 5-20°C and a relative humidity < 90% RH, with a minimum air temperature of 8°C and no condensation. Do not pre-warm this product as working times will be substantially reduced if materials are warm.

To ensure the maximum bond is achieved, grooves must be cut into the perimeter of the subfloor, typically 20mm deep by 8mm wide. These should be inset approximately 150mm from, and running parallel with the walls and adjacent to any doorways, plinths etc. including any finished edge, i.e. both sides of a day work joint. The groove must have a neat square edge and the **ACL-Screed FS** laid to the full depth forming a perimeter anchorage.

Priming

Surfaces should be primed with **ACL-Prime** at an average rate of 4 m². per kg. This is left to cure, usually overnight. If the relative humidity of the concrete is greater than 75% RH **ACL-Prime DPM** should be applied at 4 m². per kg. allow to cure for 8-12 hours @ 20°C.

Application

When the primed surface is tack free **ACL-Screed FS** should be applied at the required rate as soon after mixing as possible. (Delay can result in variation in surface finish, colour and add to application problems.)

Mix the coloured base component to an even consistency, ensuring the re-dispersion of any settled pigment, Thoroughly scrape the contents of the base and hardener components into the same container and mix thoroughly for one minute. Pour the combined base and hardener into a rotary drum mixer and add the aggregate component steadily, until a homogeneous mix of the three components is achieved. Apply to pre-primed areas and level between battens as necessary with a steel float, alternatively a sledge can be used set at the required thickness and again finished with a steel float. Where ease of cleaning is very important alongside slip resistance the final finish can be smoothed by back rolling with a short nap roller. A single pass with the weight of the roller is usually sufficient.

ACL-Screed FS units should be applied consistently with mixes from the same batch used consecutively where adjacent areas are being laid.

NB: Cure times are extended at low temperatures.

Category Guide

FeRFA Category : 8

Technical Information

The following figures are obtained from laboratory tests and our experience with this product.

Slip Resistance Dry > 50, low slip potential

Method BS7976 pt1-3 2002 Wet > 40, low slip potential

The slip resistance of a floor surface can vary as a result of the installation process, conditions at the time of application and subsequent traffic. Inappropriate cleaning or maintenance can adversely affect the performance. For further advice on potential wet areas please consult ACL.

Abrasion Resistance Average Depth of Wear (mm)
0.04

Method BS8204 /ASTM D4060

Temperature Resistance Tolerant of sustained temperatures of up to 120°C @ 9mm

Chemical Resistance Excellent Chemical Resistance
Consult ACL on specific materials

Compressive Strength 60 N/mm²

Flexural Strength 14 N/mm²

Tensile Strength 6 N/mm²

Reaction to fire classification
EN 13501-1:2007+A1: 2009. BFL - S1

VOC 9 g/l
Calculation based on a full mixed unit

Life Expectancy 10 years plus
Subjected to Industrial Traffic
ACL terms and conditions will apply

BSEN 13813 SR B 3.3 - AR 0.5 - IR>4

Resin coating/screed for use inside buildings as per ACL data sheet

Wear resistance: AR 0.5

Bond strength: B 3.3

Impact resistance: IR > 4

Maintenance and Cleaning

ACL recommend that **ACL-Screed FS** should be cleaned with a regular industrial cleaning regime with a floor scrubber utilising **Industrial Floor Cleaner** or similar with dirty water being removed.

All surfaces should be thoroughly rinsed with clean water after the use of chemical cleaners.

Health and Safety

ACL-Screed FS is formulated from materials designed to achieve the high-est level of performance as safely as possible. However, specific components require proper handling and suitable equipment, this information is given in the relevant safety data sheets. In all cases, spillages or skin contamination should be cleaned as soon as practically possible, by dry wiping of the affected area, and thorough washing with soap and water.

The information given in this data sheet is derived from tests and experience with the products and is believed to be reliable. The information is offered without guarantee to enable purchasers to determine for themselves the suitability of the product for their particular application. Any specification or advice given by ACL Industrial Flooring (ACL) Limited or its agents is based on the information supplied by the purchaser. ACL Industrial Flooring (ACL) Limited cannot be held accountable for errors or omissions as a result of that information being incorrect or incomplete. No undertakings can be given against infringement of patents. Some materials are derived from natural sources. As such some variation may occur. Site conditions may also contribute to variation in finish and colour.